UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,464	12/28/2000	Michael S. Borella	00-683	6594

20306 7590 03/30/2005		EXAMINER
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP		HAN, CLEMENCE S
300 S. WACKER DRIVE		

ART UNIT	PAPER NUMBER
2665	

32ND FLOOR
CHICAGO, IL 60606

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/750,464	BORELLA ET AL.
	Examiner	Art Unit	
	Clemence Han	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 February 2005</u>.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-5,7-13 and 15-21</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-5,7,9-13 and 15-21</u> is/are rejected.
7)☒ Claim(s) <u>8</u> is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>02/25/05</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Double Patenting

1.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman,* 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi,* 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum,* 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel,* 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2.   Claim 1 and 13 are rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over claim 4 of U.S.

Patent No. 6,353,614. Although the conflicting claims are not identical, they are

not patentably distinct from each other because claim 1 of U.S. Patent No.

6,353,614 encompass the limitations of claim 1 and 13 of the instant application. It

is well settled that the omission of an element and its function is an obvious

expedient if the remaining elements perform the same function as before, In re

Karison, 163 USPQ 184 (CCPA 1963). Also not Ex parte Rainu, 168 USPQ 375

(Bd. App. 1969).

Claim Rejections - 35 USC § 103

3.   The text of those sections of Title 35, U.S. Code not included in this action

can be found in a prior Office action.

4.   Claim 1-5, 7, 9-13 and 15-21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Neves et al. (US 6,691,227) in view of Coile et al. (US

6,061,349).

Regarding claim 1, Neves teaches a method for address management of

mobile nodes, said method comprising the steps of: receiving a registration request

message from a first mobile node 330 (Column 11 Line 58-65); and assigning a

unique port numbers to said first mobile node (Column 12 Line 43-49). Neves,

however, does not teach assigning a first range of globally unique port numbers to

said first mobile node. Coile teaches assigning a first range of globally unique port

numbers (Column 6 Line 62 – Column 7 Line 1). It would have been obvious to

one skilled in the art to modify Neves to assign a range of globally unique port

numbers as taught by Coile in order to support multiple virtual ports (Column 7

Line 1-3).

Regarding claim 2, Neves teaches transmitting said unique port number to

said first mobile node (Column 12 Line 66 – Column 13 Line 2). Neves, however,

does not teach said first range of globally unique port numbers. Coile teaches said

first range of globally unique port numbers (Column 6 Line 62 – Column 7 Line

1). It would have been obvious to one skilled in the art to modify Neves to

transmit a range of globally unique port numbers as taught by Coile in order to

support multiple virtual ports (Column 7 Line 1-3).

Regarding claim 3, Neves teaches assigning a network address to said first

mobile node (Column 12 Line 44-45). Neves, however, does not teach

transmitting said network address and said first range of globally unique port

numbers to said first mobile node. Coile teaches transmitting said network address

and said first range of globally unique port numbers to said first mobile node (Step

16 in Figure 9A). It would have been obvious to one skilled in the art to modify

Neves to assign a range of globally unique port numbers as taught by Coile in

order to accommodate more application [0140].

Regarding claim 4, Neves teaches said network address is an Internet

Protocol (IP) address (Column 6 Line 12).

Regarding claim 5, Neves teaches said network address can be shared with a

second mobile node (Column 12 Line 54-56).

Regarding claim 7, Neves teaches assigning a unique disjoint port numbers

to mobile node (Column 12 Line 43-49). Neves, however, does not teach

assigning a second range of globally unique port numbers to said second mobile

node. Coile teaches assigning a range of globally unique port numbers (Column 6

Line 62 – Column 7 Line 1). It would have been obvious to one skilled in the art

to modify Neves to assign a range of globally unique port numbers as taught by

Coile in order to support multiple virtual ports (Column 7 Line 1-3).

Regarding claim 9, Neves teaches said registration request message includes

a care-of address for said first mobile node (FAM field in Figure 4).

Regarding claim 10, Neves teaches associating said care-of address with said

first range of globally unique port numbers (Column 13 Line 31-33).

Regarding claim 11, Neves teaches assigning a network address to said first

mobile node (Column 12 Line 44-45); and associating said care-of address with

said network address and unique port numbers (Column 13 Line 31-33). Neves,

however, does not teach a first range of globally unique port numbers. Coile

teaches a first range of globally unique port numbers (Column 6 Line 62 – Column

7 Line 1). It would have been obvious to one skilled in the art to modify Neves to

use a range of globally unique port numbers as taught by Coile in order to support

multiple virtual ports (Column 7 Line 1-3).

Regarding claim 12, Neves teaches receiving data packets destined for said

network address and a port number in said first range of globally unique port

numbers; and forwarding said data packets to said care-of address (Column 14 Line 39-42).

Regarding claim 13, Neves teaches A system for address management of mobile nodes, said mobile nodes including at least a first mobile and a second mobile node, said system comprising: a home agent 310, said home agent transmitting registration reply messages in response to valid registration request messages (Figure 3); and a home agent database (HAM Translation Record in Figure 3) accessible by said home agent, said home agent database containing at least a first data record and a second data record, said first data record identifying a first network address and a first unique port numbers for said first mobile node, said second data record identifying said network address and a second unique port numbers for said second mobile node (Column 8 Line 1-17). Neves, however, does not teach using sets of globally unique port numbers wherein they are disjoint. Coile teaches using sets of globally unique port numbers wherein they are disjoint (Column 6 Line 62 – Column 7 Line 1). It would have been obvious to one skilled in the art to modify Neves to use a range of globally unique port numbers as taught by Coile in order to support multiple virtual ports (Column 7 Line 1-3).

Regarding claim 15, Neves teaches said first data record includes a first

care-of address for said first mobile node, said first care-of address being different

from said first network address (Column 8 Line 1-17).

Regarding claim 16, Neves teaches said network address is an Internet

Protocol (IP) address (Column 6 Line 12).

Regarding claim 17, Neves teaches a foreign agent 340, coupled to said

home agent 310 via an intermediate network; and a foreign agent database (FAM

Translation Record in Figure 3) accessible by said foreign agent, said foreign agent

database containing a visitor data record for said first mobile node, said visitor data

record including said network address and said unique port numbers for said first

mobile node (Figure 4). Neves, however, does not teach a first range of globally

unique port numbers. Coile teaches a first range of globally unique port numbers

(Column 6 Line 62 – Column 7 Line 1). It would have been obvious to one skilled

in the art to modify Neves to use a range of globally unique port numbers as taught

by Coile in order to support multiple virtual ports (Column 7 Line 1-3).

Regarding claim 18, Neves teaches said visitor data record includes a local

address of said first mobile station (Client field in Figure 4).

Regarding claim 19, Neves teaches said care-of address station is an Internet

Protocol (IP) address (Column 6 Line 12).

Regarding claim 20, Neves teaches said first care-of address is an external IP

address associated with said foreign agent (FAM field in Figure 4).

Regarding claim 21, Neves teaches said visitor data record includes an IP

address of said home agent (Masquerade field in Figure 4).

Allowable Subject Matter

5.   Claim 8 is objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations

of the base claim and any intervening claims.

Response to Arguments

6.   Applicant's arguments with respect to claim 1-5, 7-13 and 15-21 have been

considered but are moot in view of the new ground(s) of rejection.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. The following patents are cited to further show the state of

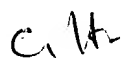the art with respect to the invention in general.
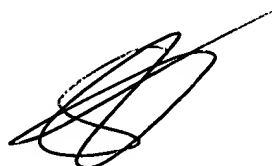
U.S. Patent 6,515,997 to Feltner et al.

8.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Clemence Han whose telephone number is

(571) 272-3158. The examiner can normally be reached on Monday-Thursday 7 -

5.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone

number for the organization where this application or proceeding is assigned is

703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Clemence Han
Examiner
Art Unit 2665

STEVEN NGUYEN
PRIMARY EXAMINER